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6. (new) A gear wheel construction for belt conveyor devices, said gear wheel having teeth, said gear wheel construction comprising a first gear wheel portion, including first half-teeth about which can be coupled, by adjustable coupling means, a second gear wheel portion, including second half-teeth, said adjustable coupling means comprising screw means engaging in corresponding threaded recesses formed in said first gear wheel portion and passing through enlarged recesses formed in said second gear wheel portion, whereby pairs of said first and second half-teeth, together, are spaced from one another to form the teeth of said gear wheel, said second gear wheel portion being suitable to turn about said first gear wheel portion, on a rotary axis of said gear wheel, and being locked by said adjustable coupling means, said gear wheel being adapted so that said first and second half-teeth in each pair may be adjusted to change the space between said first and second gear teeth.

7. (new) A gear wheel construction, according to Claim 6, wherein said first gear portion and second gear portion are coupled by facing surfaces, to cause corresponding surfaces of each pair of said first and second half-teeth to face one another.

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8. (new) A gear wheel construction, according to Claim 7, wherein said facing surfaces of each said pair of said first and second half-teeth can be moved away or toward one another by mutually rotating said first gear wheel portion and second gear wheel portion.

REMARKS

In paragraph 1 of the Office Action, the Examiner objected to the drawing on the basis that the conveyor device, as claimed in claim 5, was not

illustrated. Claim 5 has been canceled and the newly presented claims do not point out the conveyor device. for this reason, no new drawing is being submitted.

In paragraph 2 of the Office Action, the Examiner objected to the Abstract. A new Abstract, on a separate sheet of paper is attached to this Amendment. The new Abstract has been prepared with legal phraseology and favorable consideration is requested.

In paragraph 5 of the Office Action, claim 5 was rejected under 35 U.S.C. §112, first and second paragraphs. In response, claim 5 has been canceled, and new claims 6 to 8 have been submitted to clearly point out the invention. The newly presented claims have been prepared to avoid the references to the apron, timing belt etc. and the term "distance". For these reasons, it is requested that this ground of rejection not be applied against the newly presented claims.

In paragraph 9, of the Office Action, claims 1-4 were rejected under 35 U.S.C. §102(b) as being anticipated by Yasuoka.

Reconsideration is requested.

New claim 6, which is substantially a combination of previous claims 1 and 2, the invention is defined as a gear wheel construction, specifically designed for belt conveyor devices. The gear wheel, comprises a first gear wheel portion, including first half-teeth, about which can be coupled, by adjustable coupling means, a second gear wheel portion including second half-teeth.

The claimed gear wheel construction is novel and non-obvious over the Yasuoka patent. This patent discloses a backlash correcting device for a swivel arm of a robot, which comprises a gear shaft, a spur gear mounted at one end of the shaft and having first and second axial surfaces and a plurality of threaded axial holes, the spur gear further having an axially extending first pin having a predetermined length. The first pin is fixed to said first axial

surface of said spur gear and the said shaft is coupled through a speed reducer to an electric motor, a correcting gear having first and second axial surfaces and is disposed with its second axial surface facing the first axial surface of said spur gear. The correcting gear has an axial throughgoing hole through which said first pin extends, a plurality of additional through holes in alignment with said threaded axial holes in said spur gear and an axially extending second pin having a predetermined length, said correcting gear having the same diameter and number of teeth as said spur gear.

The two gears are superimposed and not engaged within one another in the same manner that the applicants gear wheel is defined in new claim 6.

Claim 6 point out two gears with half teeth which are fitted into one another. One gear has first teeth and the second gear has second teeth, each tooth of the gear wheel construction being formed by a first teeth and second teeth which have respective facing surfaces thereby each tooth of the composite gear wheel construction comprises two partial teeth adjoined by their respective facing surfaces.


The Yasuoka gear wheel construction does not suggest the claimed device because the two partial gear are overlapped it is not possible to form a gear wheel in which the single tooth of the gear wheel is constituted by two partial first and second teeth having respective mutually facing surfaces.

The prior art gear wheel cannot operate in the gear wheel construction which is pointed out in new claims 6-8. For these reasons, it is requested that claim 6 to 8 be favorably considered.

The other patents of record art documents have been carefully considered, but it is submitted that they, either individually or in combination, do not anticipate the new claims.

Accordingly, allowance of the application is respectfully requested.

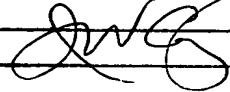
Respectfully submitted,


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Marked up ~~copy~~ of amendment to the specification:

--In operation, each tooth 12 will be worn [warn] on its outer surfaces, thereby reducing the overall dimension, i.e. the distance between the outer surfaces.-

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Abstract

A³ 1 A gear wheel which has a first gear wheel portion, including first half-teeth, which can be coupled to a second gear wheel portion, including second half-teeth, by an adjustable coupling, so that the first and second half-teeth form by pairs the teeth of the gear wheel. The second gear wheel portion can be turned with respect to the first gear wheel portion about the rotary axis of the gear wheel, and can be locked by the adjustable coupling, so as to change the distance of the first and second half-teeth in each pair.

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